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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,719	05/24/2001	Brian L. Brinker	RSW920010023US1	2801

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EXAMINER

WONG, LESLIE

ART UNIT	PAPER NUMBER
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2167

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/864,719

Applicant(s)

BRINKER ET AL.

Examiner

Leslie Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11-17,19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-17,19 and 20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Response to Amendment

1. Receipt of Applicant's Amendment, filed 24 June 2004, is acknowledged.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,2, 4-6, 8, 9, 11-14, 16, 17, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amado** (U.S. Patent 5,701,400) in view of **Miller et al.** (U.S. Patent 6,553,366 B1).

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Regarding claims 1, 11, and 16, **Amado** teaches a method and a computer program product of systematically diagnosing data problems in a database, comprising the steps of:

- a). identifying a set of tests to be performed on the database (Figs. 4 and 12 and col. 38, lines 12-29);
- b). preparing a test program corresponding to the set of tests using SQL (Structured Query Language) (col. 11, lines 56-57);
- c). executing the test program on the database so that the set of tests are performed on the database simultaneously (col. 39, lines 1-5); and
- d). automatically providing results of the test program in a predetermined format, whereby data problems in the data base can be diagnosed by viewing the results (col. 39, lines 16-29).

Amado further teaches wherein the preparing step is implemented using WITH (i.e., include that test with larger set of queries) (col. 74, lines 34-38).

Amado does not explicitly teach wherein the preparing step is implemented using WITH and OUTER JOIN commands of the SQL.

Miller et al., however, teaches wherein the preparing step is implemented with an OUTER JOIN command of the SQL (col. 17, lines 23-30).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Miller's** teaching would have allowed **Amado's** to provide user with all rows for all key columns

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found in the first table specified, and fills in any missing values from the other tables with null values (col. 17, lines 26-29).

Regarding claims 2, 9, and 17, **Amado** further teaches wherein the predetermined format is a table format (Figs. 99-101).

Regarding claims 4, 12, and 19, **Amado** further teaches wherein at least one of the set of tests involves performing a test on a particular record stored in a table of the database, said record being identifiable by one or a combination of key values (col. 36, lines 33-41).

Regarding claims 5 and 13, **Amado** further teaches wherein, in the preparing step, the test program is prepared manually (col. 20, lines 20-25 and lines 56-63).

Regarding claims 6 and 14, **Amado** further teaches wherein, in the preparing step, the test program is prepared by computer software (col. 26, lines 16-17 and col. 38 lines 13-16).

Regarding claim 8, **Amado** further teaches A system for systematically diagnosing data problems in a database, comprising:

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- a). a database including a plurality of tables, each table containing at least one row of data, each row identifiable by one or a combination of key values (Fig. 72); and
- b). a testing module (Fig.2, element 10), coupled to the database (Fig. 2, elements 5, 7, and 9), for storing a test program written in SQL (Structured Query Language), executing the test program on the database (col. 39, lines 1-5), and
- c). automatically providing results of the test program in a predetermined format, wherein the test program corresponds to a collection of tests for diagnosing data problems in the database (col. 39, lines 16-29).

4. Claims 7, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Amado** (U.S. Patent 5,701,400) in view of **Miller et al.** (U.S. Patent 6,553,366 B1) as applied to claims 1,2, 4-6, 8, 9, 11-14, 16, 17, and 19 above in view of **Bogrett** (U.S. Patent 6,581,054 B1).

Regarding claims 7, 15, and 20, **Amado** further teaches preparing the test program based on the user's response (col. 24, lines 13-23 and 24-27).

Amado and **Miller** do not explicitly teach the steps of:

- a). displaying a set of predetermined queries to a user; and
- b). receiving the user's response to each of the predetermined queries.

Bogrett, however, teaches the steps of:

- a). displaying a set of predetermined queries to a user (col. 2, lines 7-8); and

b). receiving the user's response to each of the predetermined queries (col. 2, lines 8-10).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Bogrett's** teaching would have allowed **Amado- Miller's** to enable users to quickly and easily adapt predefined queries to their particular needs by presenting predefined query models to users for customization in order to retrieve relevant information for users specific requirements as suggested by **Bogrett** at col. 1, line 67 – col. 2, line 3.

Response to Argument

5. Applicant's arguments filed 24 June 2004 have been fully considered but they are not persuasive.

Applicant argue that he has identified the WITH command of SQL as being particularly useful for this process, and in combination with the OUTER JOIN command as claimed, provides a simple way for testing of the database and display of the results in a user-friendly manner. In response to the preceding arguments, Examiner respectfully submits that Amado teaches an artificial intelligence technology that generates diagnostics of information in the database. The diagnostics are stored in a database which can be queried using the SQL as standard interface language with downdrilling to the associated data which generated the diagnostic (abstract and col. 11, lines 56-57). Miller teaches an analytic logical data model used for data mining

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applications in a relational database management system (col. 1, lines 59-62). Miller uses the SQL statements and programmatic iteration together to perform computations and order data within the relational database (col. 11, lines 28-34). In particular, Miller teaches performing a LEFT outer join which returns rows for all key column values found in the first table, and fills in any missing values from the other tables with null values from the other tables with null values to support data reorganization. The data reorganization function that supports the JOIN function that joins tables together into a combine result table (col. 17, lines 13-17) which is in conformity with the Applicant's invention of simplifying the displaying of the results of the multiple tests as indicated on page 10 second paragraph of in Applicant's Response. The fact that the SQL language will allow the combination WITH and OUTER JOIN in a select statement would further support the Examiner's position for combining Amado and Miller references. For the above reasons, Examiner submits that the combination of Amado and Miller would arrive at Applicant claimed limitations. Evidence of a suggestion, teaching or motivation to combine prior art references may flow, inter alia, from the references themselves, the knowledge of one of ordinary skill in the art or from the nature of the problem to be solved. See *In re Dembiczak*, 175 F.3d 994, 1000, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (571) 272-4120. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Leslie Wong
Patent Examiner
Art Unit 2167

LW
20 December 2004


Primary Examiner